

What Is Claimed Is:

1. A display control device comprising:

an image data generating unit for generating image data for a plurality of display faces for each of the display faces according to a series of data;

an image data storage unit for storing generated image data respectively in storage areas of memory unit, the storage areas corresponding to the display faces; and

a display processing circuit for reading image data of a plurality of display faces stored in the memory unit to superimpose the image data, and converting the image data into display output signals,

wherein the storage areas from which image data is read are capable of switching for each display face by the display processing circuit.

2. The display control device according to claim 1,

wherein setting is made whether or not a storage area from which the image data is read is switched for each display face at termination of generation of image data for one

display face.

3. The display control device according to claim 1, further comprising a first instruction,

wherein the first instruction indicating the termination of generation of image data for one display face includes a plurality of display switching enable bits indicating whether or not a storage area from which image data is read is switched for each of the plurality of display faces, and

wherein the setting of switching to a storage area from which the image data is read is performed based on the display switching enable bits.

4. The display control device according to claim 1, further comprising a first register for storing information indicating from which storage area the image data of each display face is read,

wherein the setting of switching to a storage area from which the image data is read is performed by updating the first register.

5. The display control device according

to claim 4, further comprising an address register for storing the addresses of a plurality of storage areas in which the image data of each display face is stored,

wherein the display processing circuit reads image data, using an address selected based on information of the first register from the address register.

6. The display control device according to claim 2,

wherein, when the setting of switching to a storage area from which the image data is read is performed, switching to the storage area from which the image data is read is performed at timing synchronous with a display transition synchronous signal of a display device after the setting.

7. The display control device according to claim 3,

wherein, when the setting of switching to a storage area from which the image data is read is performed, switching to the storage area from which the image data is read is performed at timing synchronous with a display

transition synchronous signal of a display device after the setting.

8. The display control device according to claim 7,

wherein information stored in the first register is updated by information contained in the display switching enable bits.

9. A microcomputer comprising:

a central processing unit;

a display control device for performing drawing processing and display control; and

a memory,

wherein the display control device includes a display unit that controls display information indicating storage destinations of image data to output display signals to a display device connected to the outside,

wherein the display unit includes a plurality of display plane processing units each using image data of a plurality of display faces that is capable of being displayed in a superimposed form on a display screen,

wherein the display plane processing units include a plurality of pieces of display

information indicating the storage destinations of image data of corresponding display faces, and

wherein the display control device is capable of updating the display information used in the plural display plane processing units after receiving a first instruction indicating the termination of drawing processing.

10. The microcomputer according to claim 9,

wherein the display information used in the plural display plane processing units is updated at timing synchronous with the display transition synchronous signal of the display device.

11. The microcomputer according to claim 9,

wherein the first instruction includes information for updating the display information.

12. The microcomputer according to claim 9,

wherein the display information is address

information of storage unit in which image data is stored.

13. The microcomputer according to claim 10,

wherein two or more pieces of the display information used in the display plane processing units is capable of being updated at the same time.

14. A navigation system comprising:  
the display control device according to claim 1;

a central processing unit for generating the series of commands executed by the display control device or data;

a memory unit for storing image data generated by the display control device;

a display device; and

a memory device for storing map information,

wherein image data is generated by the display control device according to the map information read from the memory device and a map is displayed on the display device.

15. A display control device comprising:

an image data generating unit for generating image data of a plurality of display faces according to a series of commands or data;

an image data storage unit for storing generated image data respectively in storage areas of memory unit, the storage areas corresponding to the display faces; and

a display processing circuit for reading image data of a plurality of display faces stored in the memory unit to superimpose the image data, and converting the image data into display output signals,

wherein the image data of the plural display faces is comprised of image data further subjected to superimposing processing for each display face and a plurality of image data preceding and following the image data.

16. The display control device according to claim 15,

wherein setting is made whether or not a storage area from which the image data is read is switched for each display face at the termination of generation of image data for one

display face.